aaaacataatgtgggtctcgcgtctgcctctctcccgccctaattagcagctgcctccc tccatattgtcccaggccagcgcttcttttgtgctcccagattcctgggtgcaaggtggc tcaggggcacagtgatccaaccctggcctctgaacgcggagcggccattccttgggcc agcctqqagacggccccctgcagcaggctaatcttagacttgcctttgtctggcctggg tgtggacgcaatgtgcctgtcaattccccgccacctcagagcactataaaccccagaccc ctgggagtgggtCACAATTGACAGCCTCAAGGTTCCTGGCTTTTTGAACCACCACAGACA gtaaagatccagggatgaggggtgactcagccatcccagaggaagcaaaaagagtgctt gctcagagggctggaagaaaggccaaaggtgtctccactcttggtcttttcctqqqtqtq ctctgaggcaggagcacctgccttggctcacattgggttgggtgctgttttgctaagagc ctgtgtttgctgagctcatatgtgtcaggtgctccgtttgcacctgtcatctcttgtcat CCtcccaacagccttgcagagtagaaattatttctagtatacccagtttacaggtaaggg agctgtgcctctgaaagggcaggaaactggttcaaaggaggttcagtcactcctg caagggggcaggcagatgagagagcattctggagtcttgctagttcctgatttccatqtq tttccctgctgtggagaggaagttggggggactcagtagggcccgggtttttcccaagtt tacaacttctgctgcagacagacactcctgttttcaggtggagtggcaagtgccctagtg gtggcaacagtggcctaagtctccagagaaaagggggattcactctgcccagggggtctc aaaaggcttcctgtgggagatgctctgctgggtcttgaaggaggagcagggaaagtaggc cgataccagcaagggcgcaaagcaaggagaactaagtgacagccagaaaggagtgcaggc ttggagggggcgcggagccagaggggcaggtectgtgcgtgggagctggtggcgggcgc gtgggaagaccccccagcgccctgtctccgtctccctag

aggtgcatgc

FIG. 1

```
M N L P S T K
V S W A A V T L L L L L L L P P A L L
S S G A A A Q--P-L-P-D-C-C-C-R-Q-K-T-C-S-C-
R--L-Y-E-L-L-H-G-A-G-N-H-A-A-G-I-L-L-T-L G
K R R**S**G**P**P**G**L**Q**G**R**L**Q**R**L**L**Q**A**S*
G**N**H**A**A**G**I**L**T**M G R R A G A E P A P
R P C L G R R C S A P A A A S V A P G G
```

## FIG. 2

GGC TCG GCG GCC TCA GAC TCC TTG GGT ATT TGG ACC ACT GCA CCG AAG ATA CCA TCT CTC CGG ATT GCC TCT CCC TGA GCT CCA GAC ACC ATG AAC CTT CCT TCT ACA AAG GTT CCC TGG GCC GCC GTG ACG CTG 191 136 GAC GCG CAG CCT CTG CCC GAC TGC TGT CGC CAG AAG ACG TGT TCC 181 TGC CGT CTC TAC GAA CTG TTG CAC GGA GCT GGC AAC CAC GCC GCG 226 271 GGC ATC CTC ACT CTG GGA AAG CGG CGA CCT GGA CCC CCA GGC CTC CAA GGA CGG CTG CAG CGC CTC CTT CAG GCC AAC GGT AAC CAC GCA 316 GCT GGC ATC CTG ACC ATG GGC CGC CGC GCA GGC GCA GAG CTA GAG 361 406 CCA TAT CCC TGC CCT GGT CGC CGC TGT CCG ACT GCA ACC GCC ACC GCT TTA GCG CCC CGG GGC GGA TCC AGA GTC TGA ACC CGT CTT CTA 451 TCC CTG TCC TAG TCC TAA CTT TCC CCT CTC CTC GCC GGT CCC TAG 496 GCA ATA AAG ACG TTT CTC TGC TAA AAA AAA AAA AAA AAA AAA AAA M N L P S T K V P W A A V T L

L L L L L P P A L L S L G V

D A Q---P---L---P---D---C---C---R---Q---K--T---C---S
C---R---L---Y---E---L---L---H---G---A--G--N--H---A--A
G---I---L--T---L G K R R\*\*\*P\*\*\*G\*\*\*P\*\*\*P\*\*\*G\*\*\*L\*

Q\*\*\*\*G\*\*\*R\*\*\*L\*\*\*Q\*\*\*R\*\*\*L\*\*\*L\*\*\*Q\*\*\*A\*\*\*N\*\*\*G\*\*\*N\*\*\*H\*\*\*A\*

A\*\*\*\*G\*\*\*I\*\*\*L\*\*\*T\*\*\*M G R R A G A E L E

P Y P C P G R R C P T A T A T

A L A P R G G S R V

FIG. 4

FIG. 5